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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,906	09/25/2003	Kei-Hsiung Yang	TSAI20.004AUS	9188
20995 7590 01/11/2008 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER KIM, RICHARD H	
			ART UNIT 2871	PAPER NUMBER
			NOTIFICATION DATE 01/11/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
eOAPilot@kmob.com

Office Action Summary

Application No.

10/672,906

Applicant(s)

YANG ET AL.

Examiner

Richard H. Kim

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 21, 28, 29, 30, 37 and 38 rejected under 35 U.S.C. 103(a) as being unpatentable over Noh et al. (US 6,646,707 B2) in view Hattori et al. (US 6,671,009 B1).

Referring to claims 21 and 30, Noh et al. discloses a device comprising a first substrate (col. 3, line 46, 47); a plurality of scan lines (21) located on the first substrate; a plurality of video data lines (23) located on the first substrate and arranged to cross the scan lines, wherein any adjacent scan lines and any adjacent video lines define a pixel region (col. 3., line 47), the pixel region comprising a common electrode line (30); and a plurality of pixel electrodes (29) located at the pixel region, wherein the pixel electrode is divided into a plurality of sub pixel electrodes (sub pixel electrodes defined and separates by S1 in Figure 6); a closed slit (S1) is located between adjacent sub pixel electrodes, and the portion of the common electrode line (30) is under the slit (S1); and the slit (S1) is located within the common electrode (30). Noh et al. further discloses a second substrate corresponding to the first substrate (col. 4, lines 5-16). However, the reference fails to disclose a plurality of liquid crystal molecules disposed between the first and second substrate and transformed from splay state to bend state by the common electrode

Hattori et al. discloses a plurality of liquid crystal molecules disposed between the first and second substrate and transformed from splay state to bend state by the common electrode (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a plurality of liquid crystal molecules disposed between the first and second substrate and transformed from splay state to bend state by the common electrode since one would be motivated to improve response time (col. 2, lines 23-41).

Referring to claims 28 and 37, Noh et al. discloses that a portion of the common electrode line partially overlaps with the corresponding pixel electrode to form a capacitor structure (Fig. 6, ref. 30, 29). A capacitance would naturally occur between the overlapping pixel and common electrodes.

Referring to claims 29 and 38, Noh et al. discloses that the pixel electrode is formed from an ITO or IZO material (col. 3, line 52).

3. Claim 22-27 and 31-36 rejected under 35 U.S.C. 103(a) as being unpatentable over Noh et al., Choi et al. and Hattori et al. in view of Kim et al. (US 6,771,343 B2).

Noh et al., Choi et al. and Hattori et al. discloses the device previously recited, but fails to disclose that the common electrode line is expanded to branch parallel to the scan line and the video data line, wherein the branch common electrode is under the closed slit, and is symmetric, wherein the portion of the branch of the common electrode line partially overlaps with the corresponding pixel electrode to form a capacitor structure.

Kim et al. discloses a device comprising a common electrode line expanded to branch parallel to the scan line and the video data line, wherein the branch common electrode is under

the slit; and is symmetric, wherein the portion of the branch of the common electrode line partially overlaps with the corresponding pixel electrode to form a capacitor structure (Fig. 1a, ref. 30-34).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a common electrode line is expanded to branch parallel to the scan line and the video data line, wherein the branch common electrode is under the closed slit, and is symmetric, wherein the portion of the branch of the common electrode line partially overlaps with the corresponding pixel electrode to form a capacitor structure since one would be motivated to prevent electric field of a gate line and a data line from influencing on the electric field in a domain (col. 1, lines 61-64).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard H. Kim whose telephone number is (571)272-2294. The examiner can normally be reached on 9:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RHK

Richard H Kim
Examiner
Art Unit 2871


David Nelms
Supervisory Patent Examiner
Technology Center 2800